

FIG. 1

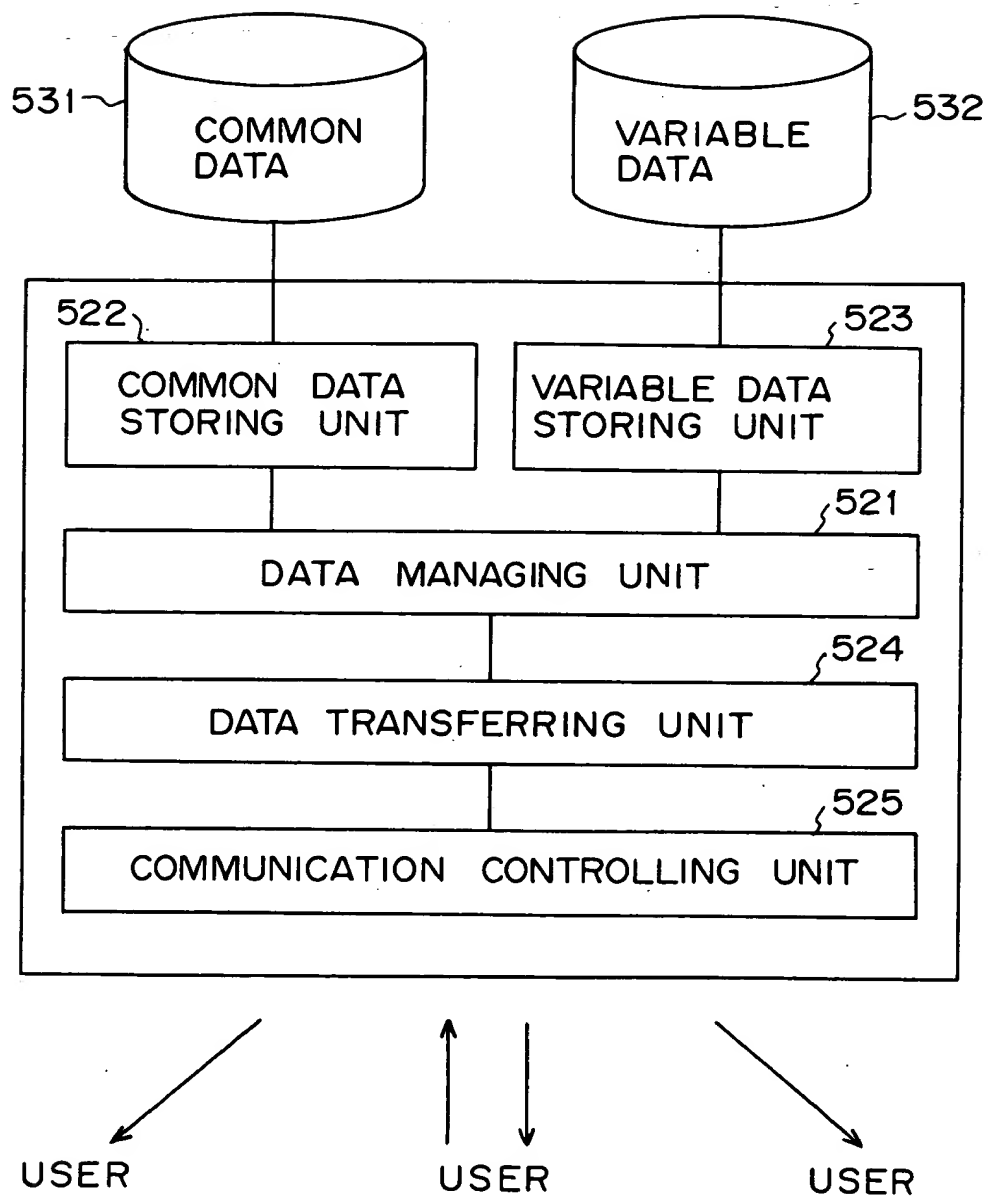
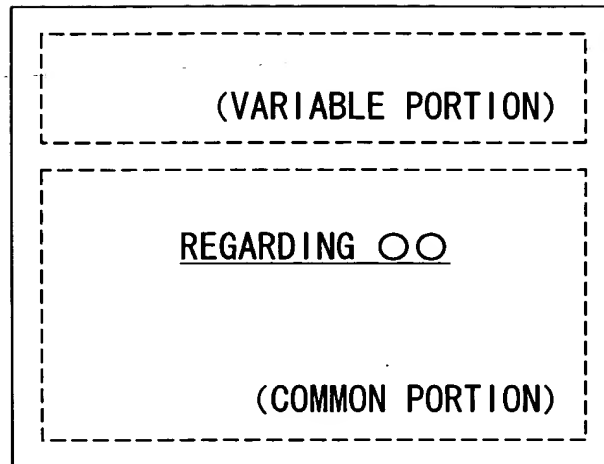


FIG. 2

001260-52279960



F I G. 3 A

ELEMENT DATA— 1	DESTINATION INFORMATION— 1
ELEMENT DATA— 2	DESTINATION INFORMATION— 2
ELEMENT DATA— 3	DESTINATION INFORMATION— 3
...	...
ELEMENT DATA— n	DESTINATION INFORMATION— n

F I G. 3 B

$\frac{1}{\sqrt{2}}$

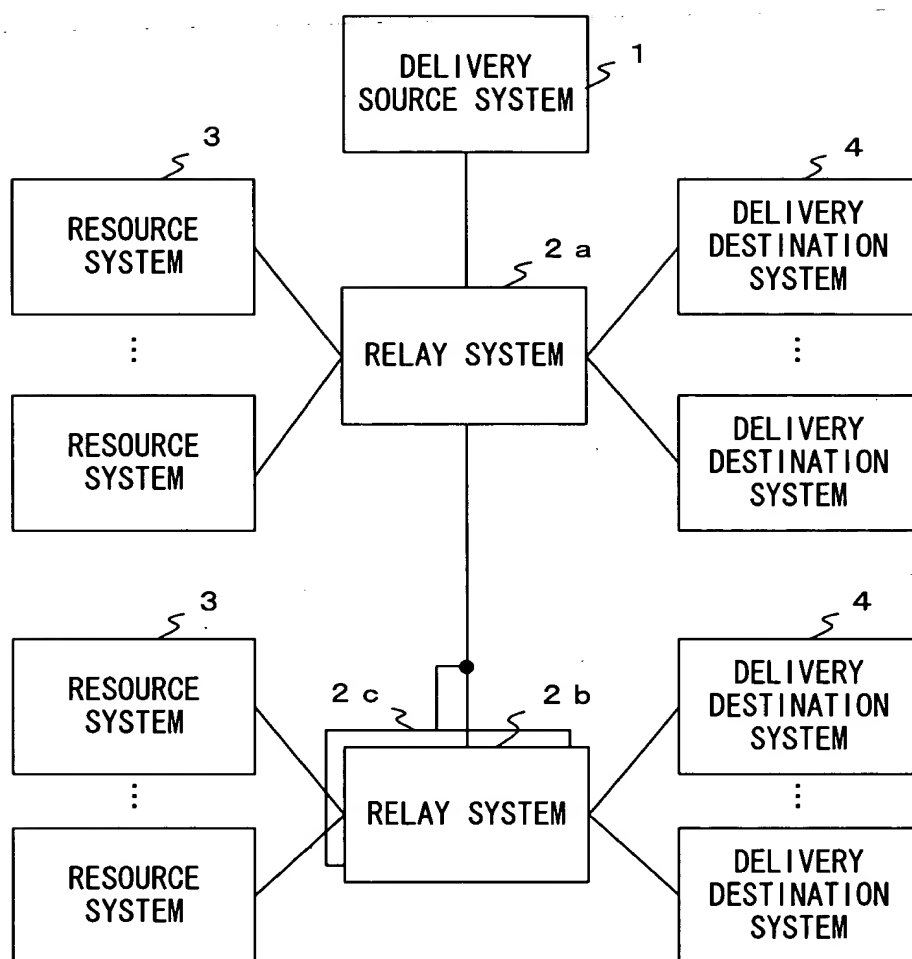


FIG. 4

The diagram illustrates the architecture of a relay system. At the top left, a dashed box contains the text: "ELEMENT DATA / RELAY SYSTEM / ASSEMBLY INFORMATION / DESTINATION INFORMATION LIST". To its right is a cylinder labeled "ELEMENT DATA" with the reference numeral 14. Below these, a large rectangular frame contains several units. At the top of this frame are two units: "STRUCTURE INFORMATION GENERATING UNIT" (12) on the left and "DATA STORING UNIT" (13) on the right. Both are connected by a vertical line to a central "DATA MANAGING UNIT" (11). Below the data managing unit are two more units: "DATA TRANSFERRING UNIT" (16) on the left and "DATA RECEIVING UNIT" (15) on the right. These two units are connected by a vertical line to a final unit at the bottom: "COMMUNICATION CONTROLLING UNIT" (17).

```
graph TD; A["ELEMENT DATA / RELAY SYSTEM / ASSEMBLY INFORMATION / DESTINATION INFORMATION LIST"] --- B["STRUCTURE INFORMATION GENERATING UNIT 12"]; A --- C["DATA STORING UNIT 13"]; B --- D["DATA MANAGING UNIT 11"]; C --- D; D --- E["DATA TRANSFERRING UNIT 16"]; D --- F["DATA RECEIVING UNIT 15"]; E --- G["COMMUNICATION CONTROLLING UNIT 17"]; F --- G;
```

FIG. 5

007260-522/9960

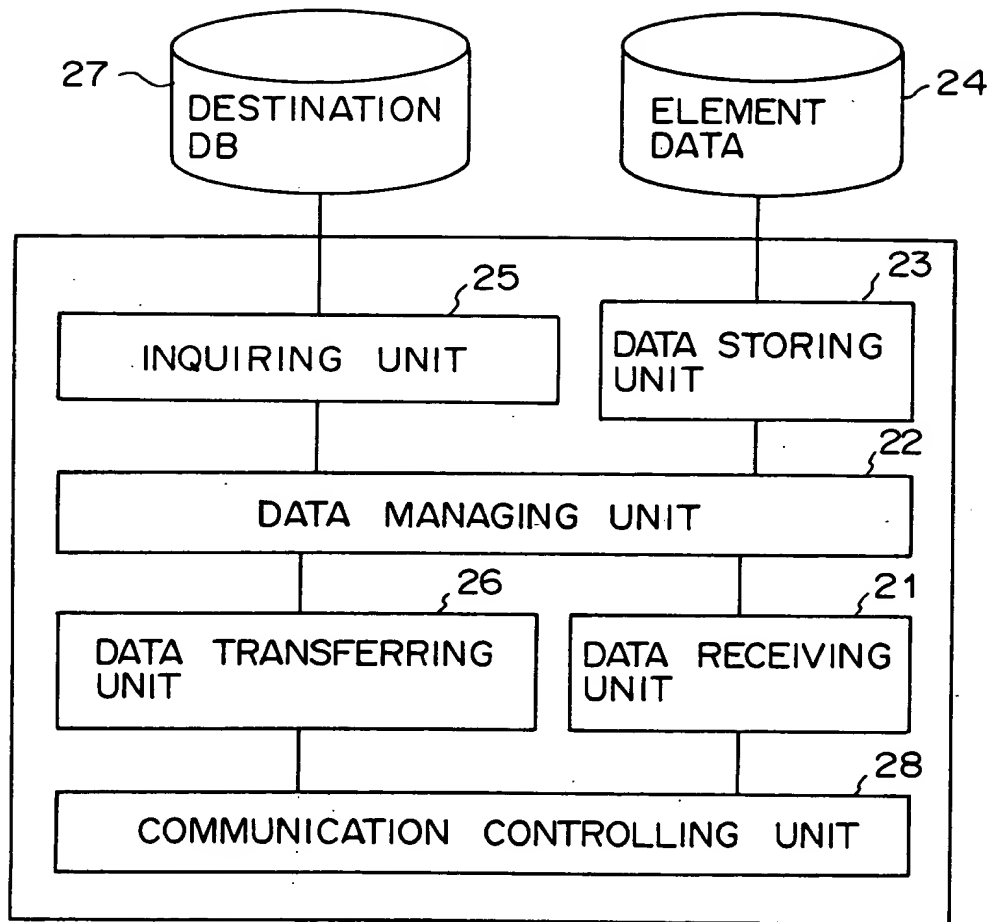


FIG. 6

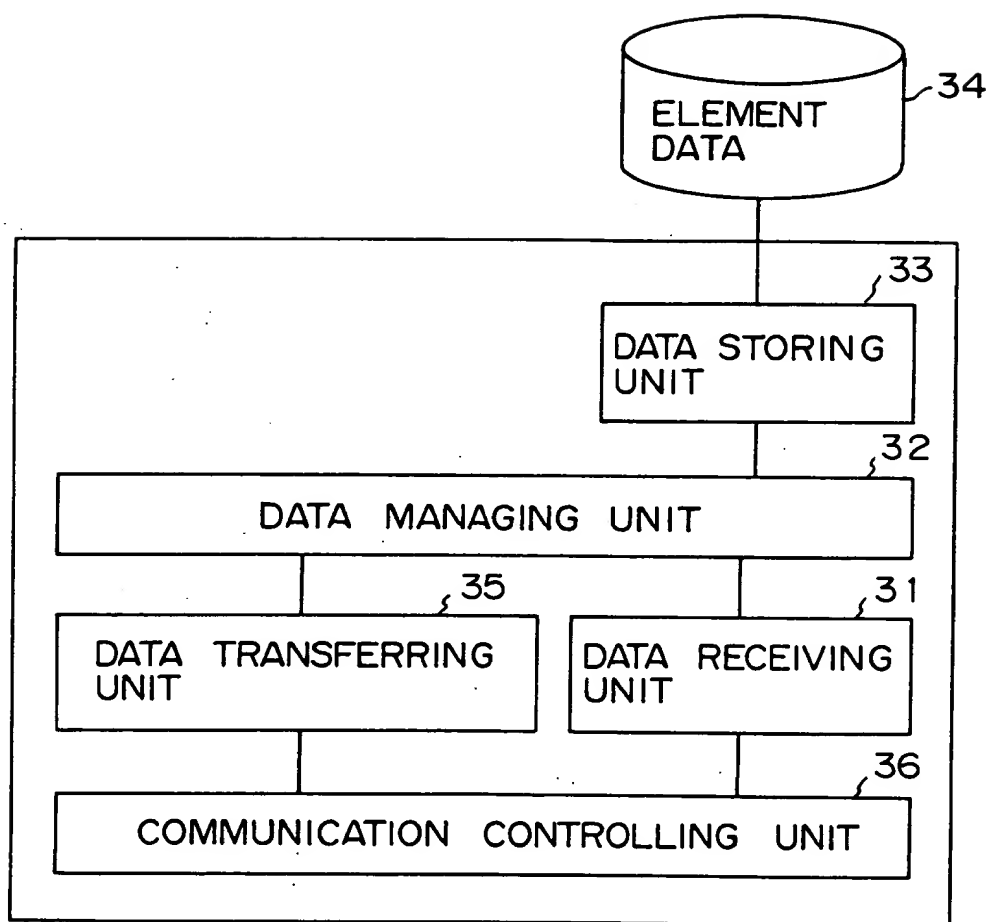
[illegible]

FIG. 7

001260:522/9900

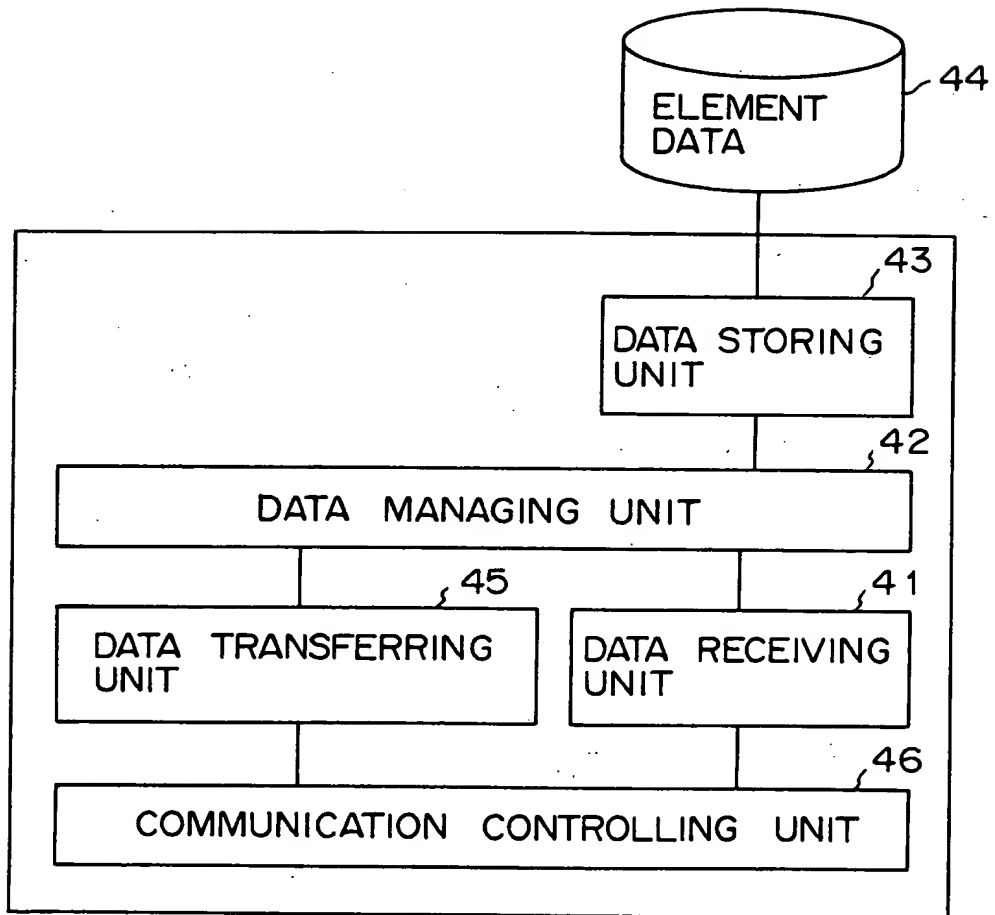
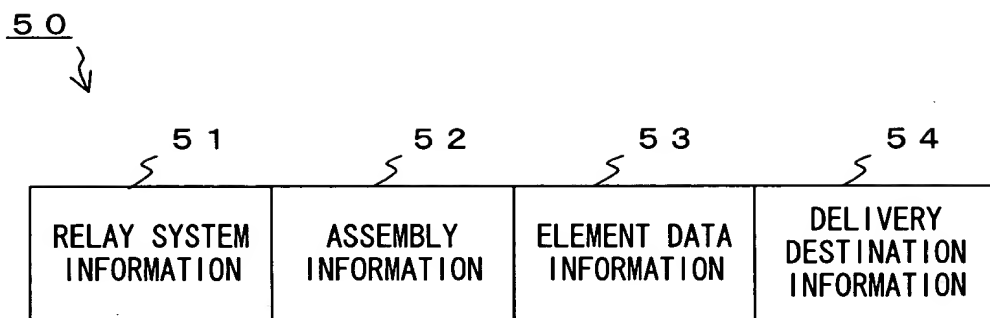
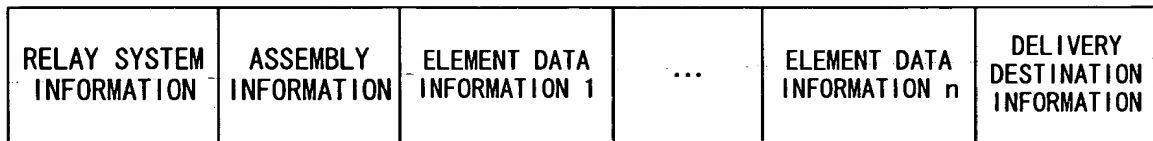


FIG. 8

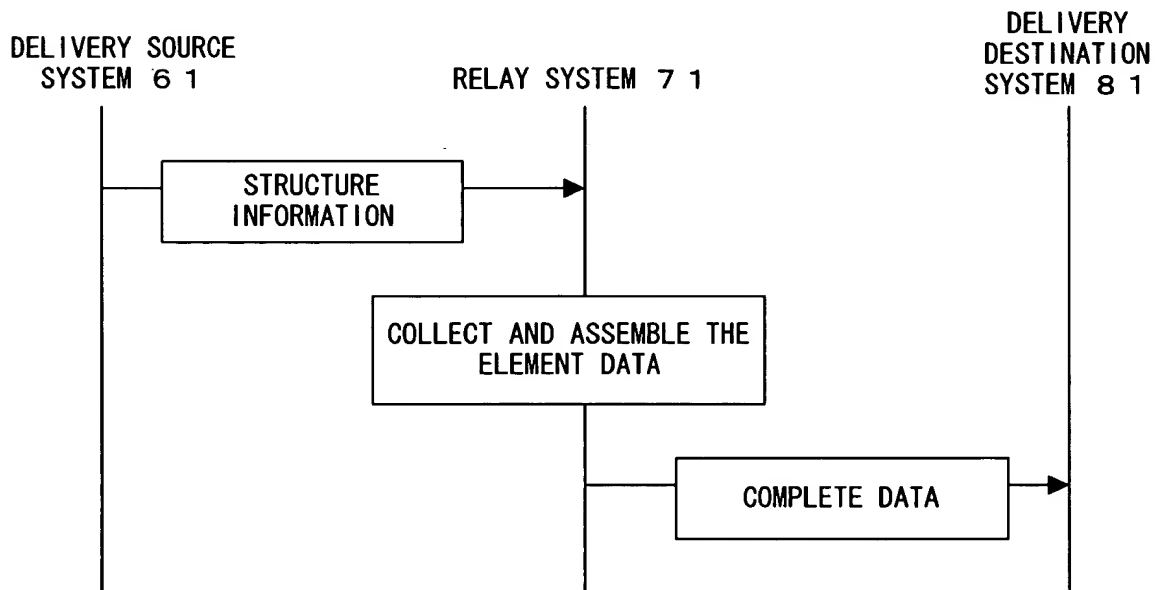
004200-3229960



F I G. 9



F I G. 1 0 A



F I G. 1 0 B

007600 922/9960

RELAY SYSTEM INFORMATION	ASSEMBLY INFORMATION	ELEMENT DATA INFORMATION 1	...	ELEMENT DATA INFORMATION n	DELIVERY DESTINATION INFORMATION 1	...	DELIVERY DESTINATION INFORMATION m
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FIG. 11A

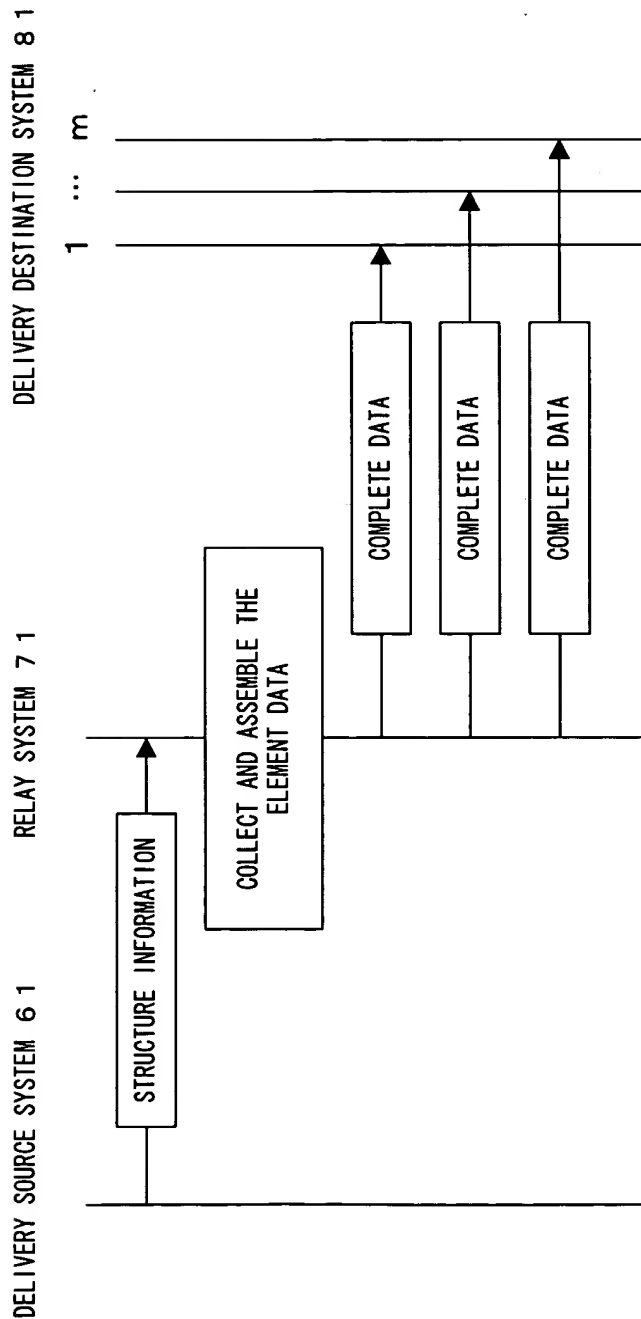
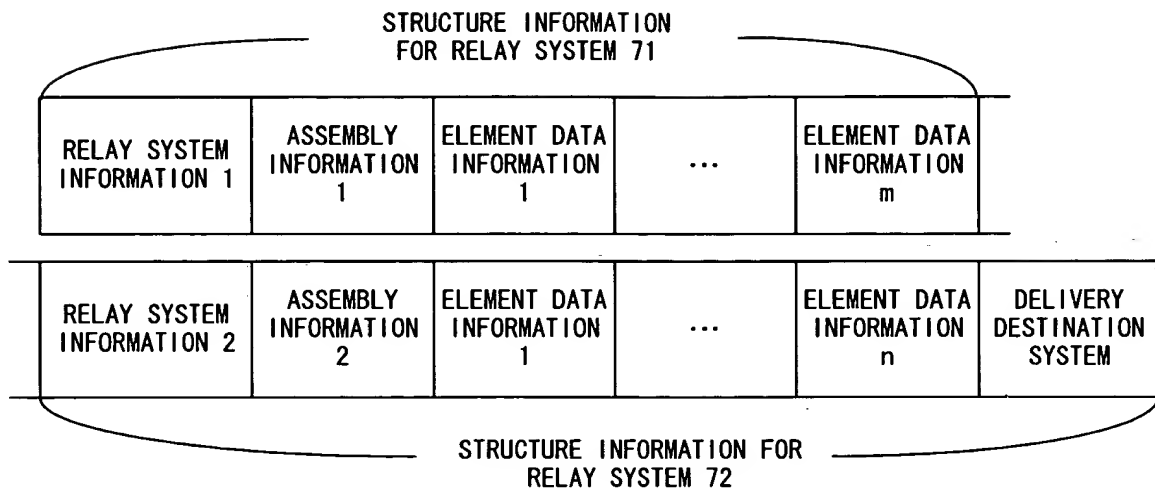
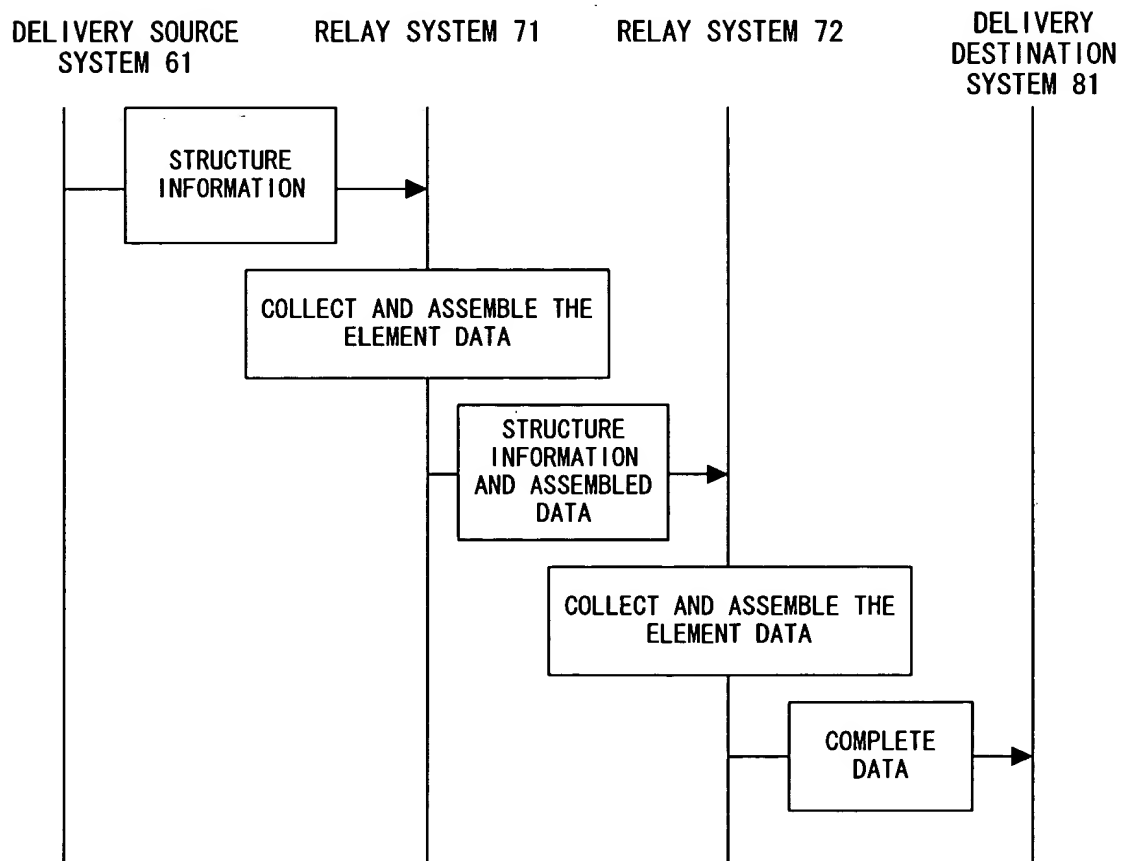


FIG. 11B



F I G. 1 2 A



F I G. 1 2 B

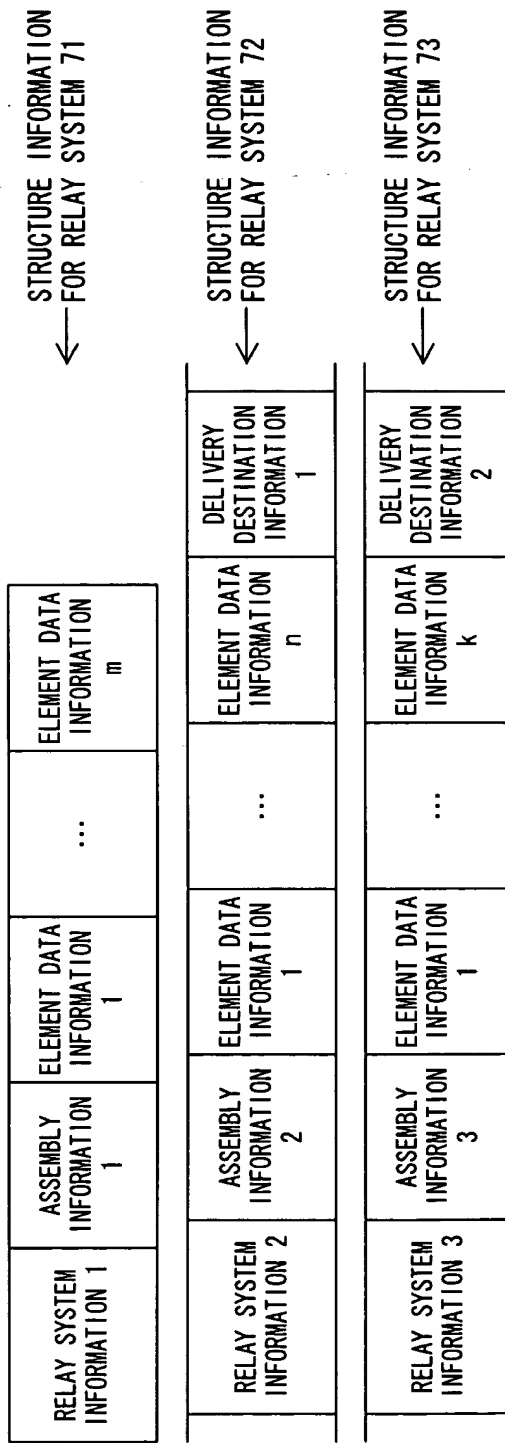


FIG. 13

001200 00029900

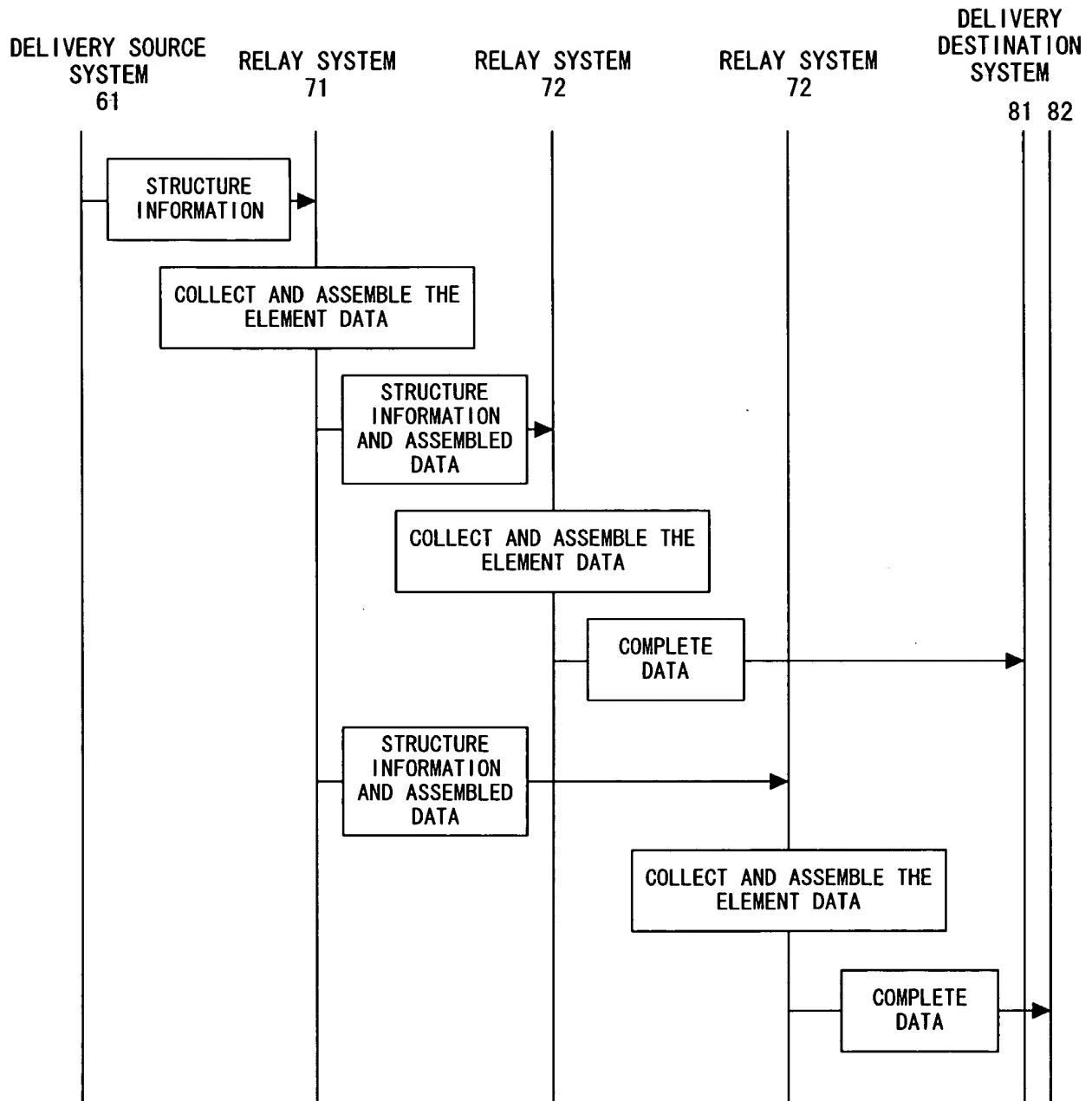


FIG. 14

RELAY SYSTEM INFORMATION 2	ASSEMBLY INFORMATION	ELEMENT DATA INFORMATION 1	...	ELEMENT DATA INFORMATION n	DELIVERY DESTINATION INFORMATION
-------------------------------	-------------------------	----------------------------------	-----	----------------------------------	--

RELAY SYSTEM INFORMATION INDICATES DELIVERY SOURCE SYSTEM

FIG. 15A

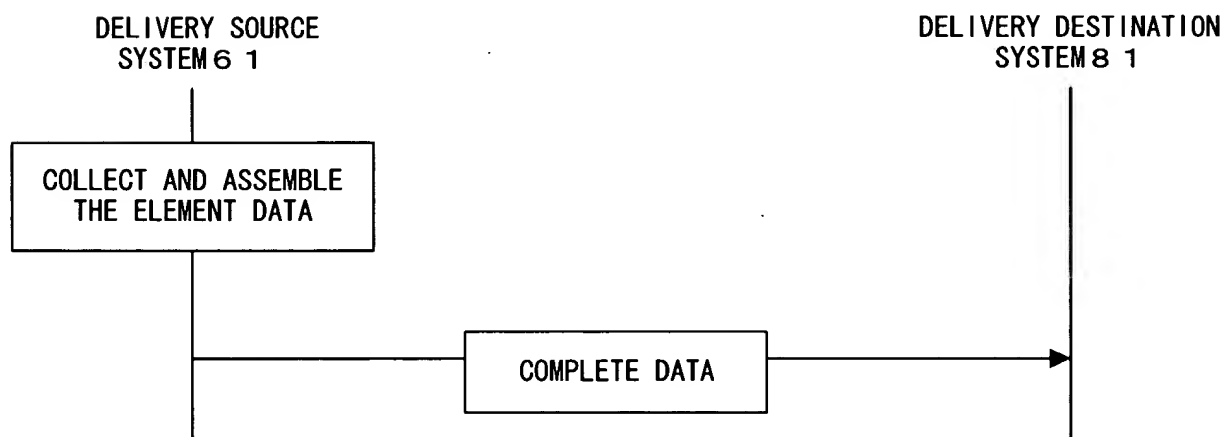


FIG. 15B

001260 922990

RELAY SYSTEM INFORMATION 2	ASSEMBLY INFORMATION	ELEMENT DATA INFORMATION 1	...	ELEMENT DATA INFORMATION n	DELIVERY DESTINATION INFORMATION
-------------------------------	-------------------------	----------------------------------	-----	----------------------------------	--

RELAY SYSTEM INFORMATION INDICATES DELIVERY DESTINATION SYSTEM

FIG. 16A

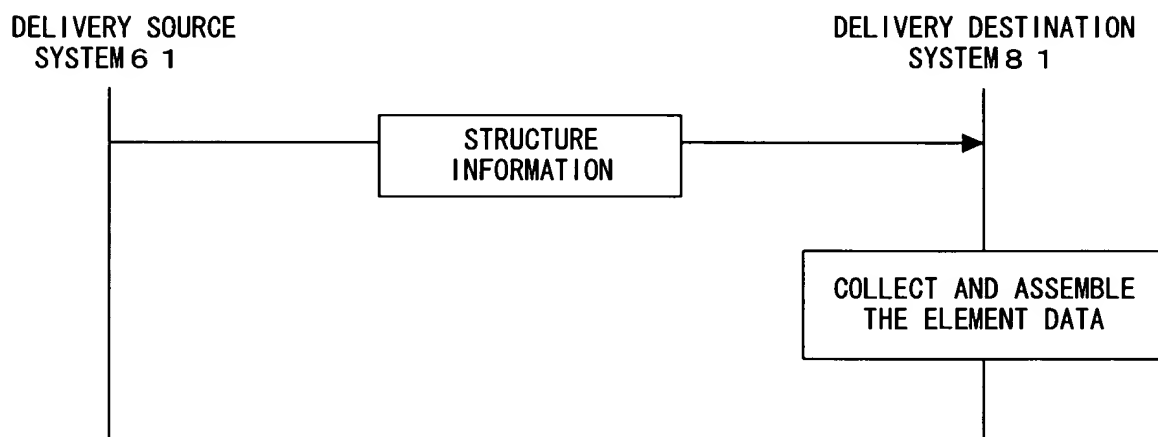


FIG. 16B

001200-52279960


```

graph TD
    START([START]) --> S1[RECEIVING RELAY SYSTEM  
INFORMATION, ASSEMBLY INFORMATION,  
AND ELEMENT DATA INFORMATION]
    S1 --> S2[GENERATING STRUCTURE  
INFORMATION]
    S2 --> S3{RELAY SYSTEM  
INFORMATION  
IS DESTINATION SOURCE  
SYSTEM ITSELF?}
    S3 -- YES --> S4[ANALYZING ELEMENT DATA  
INFORMATION]
    S3 -- NO --> S10{DELIVERY DESTINATION  
INFORMATION IS ATTACHED?}
    S4 --> S5{ELEMENT DATA  
INFORMATION IS DELIVERY  
SOURCE SYSTEM ITSELF?}
    S5 -- YES --> S6[OBTAINING ELEMENT DATA THROUGH  
DATA STORING UNIT]
    S5 -- NO --> S7[OBTAINING ELEMENT DATA  
FROM RESOURCE SYSTEM]
    S6 --> S8[ASSEMBLING ELEMENT DATA, AND  
GENERATING ASSEMBLED DATA]
    S7 --> S8
    S8 --> S9[UPDATING STRUCTURE INFORMATION]
    S9 --> S10
    S10 -- YES --> S11[DELIVERING ASSEMBLED  
DATA OR COMPLETE DATA  
TO DELIVERY  
DESTINATION SYSTEM]
    S10 -- NO --> S12[DELIVERING STRUCTURE  
INFORMATION OR STRUCTURE  
INFORMATION PLUS  
ASSEMBLED DATA TO RELAY  
SYSTEM]
    S11 --> END([END])
    S12 --> END
  
```

FIG. 17

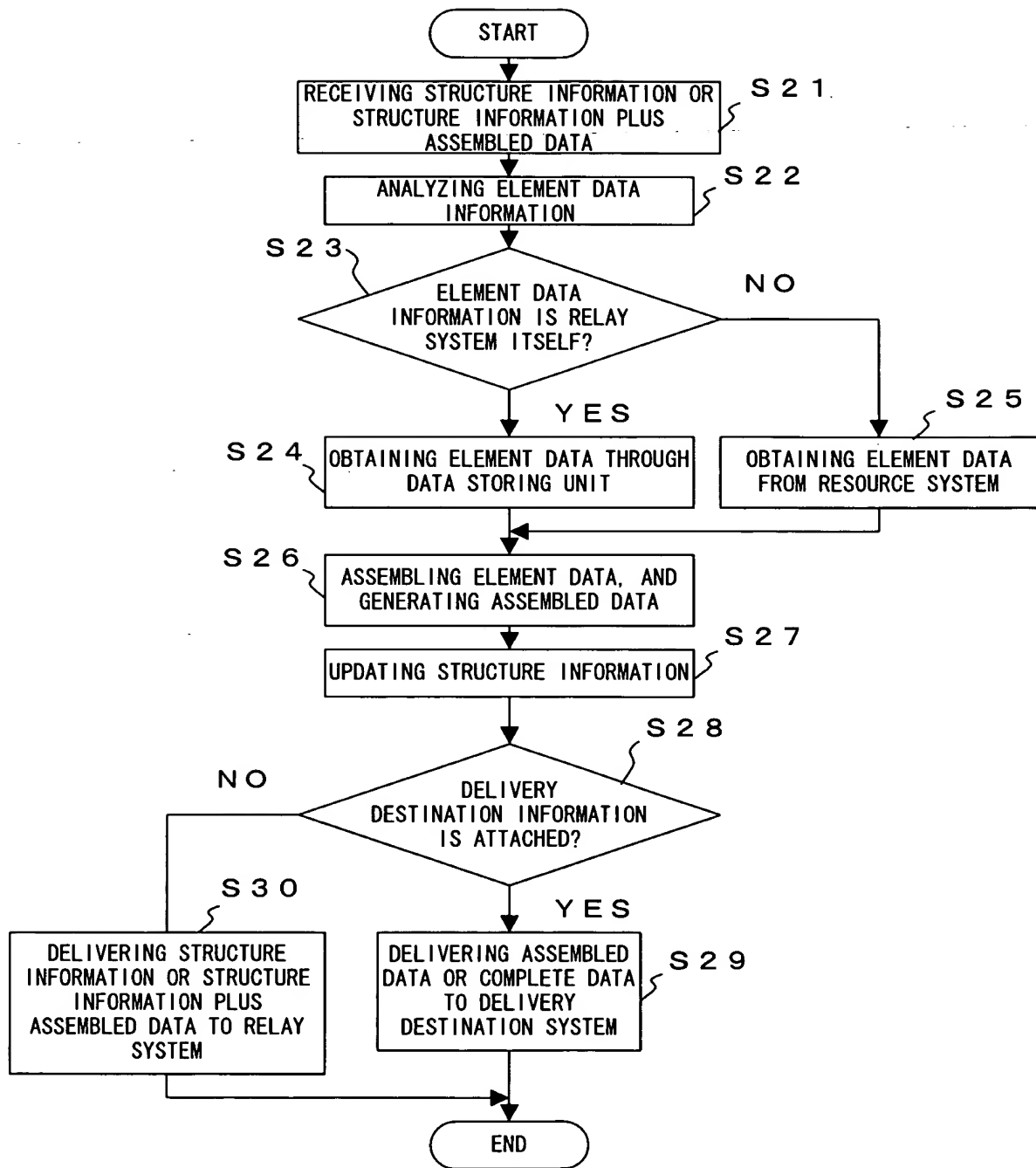


FIG. 18

```
graph TD; START([START]) --> S41[RECEIVING ELEMENT DATA TRANSFER REQUEST]; S41 --> S42[OBTAINING ELEMENT DATA THROUGH DATA STORING UNIT]; S42 --> S43[DELIVERING ELEMENT DATA TO REQUEST SOURCE]; S43 --> END([END]);
```

The flowchart illustrates the process of element data transfer. It begins with a 'START' terminal, followed by three sequential steps: 'RECEIVING ELEMENT DATA TRANSFER REQUEST' (labeled S 4 1), 'OBTAINING ELEMENT DATA THROUGH DATA STORING UNIT' (labeled S 4 2), and 'DELIVERING ELEMENT DATA TO REQUEST SOURCE' (labeled S 4 3). The process concludes at an 'END' terminal.

FIG. 19

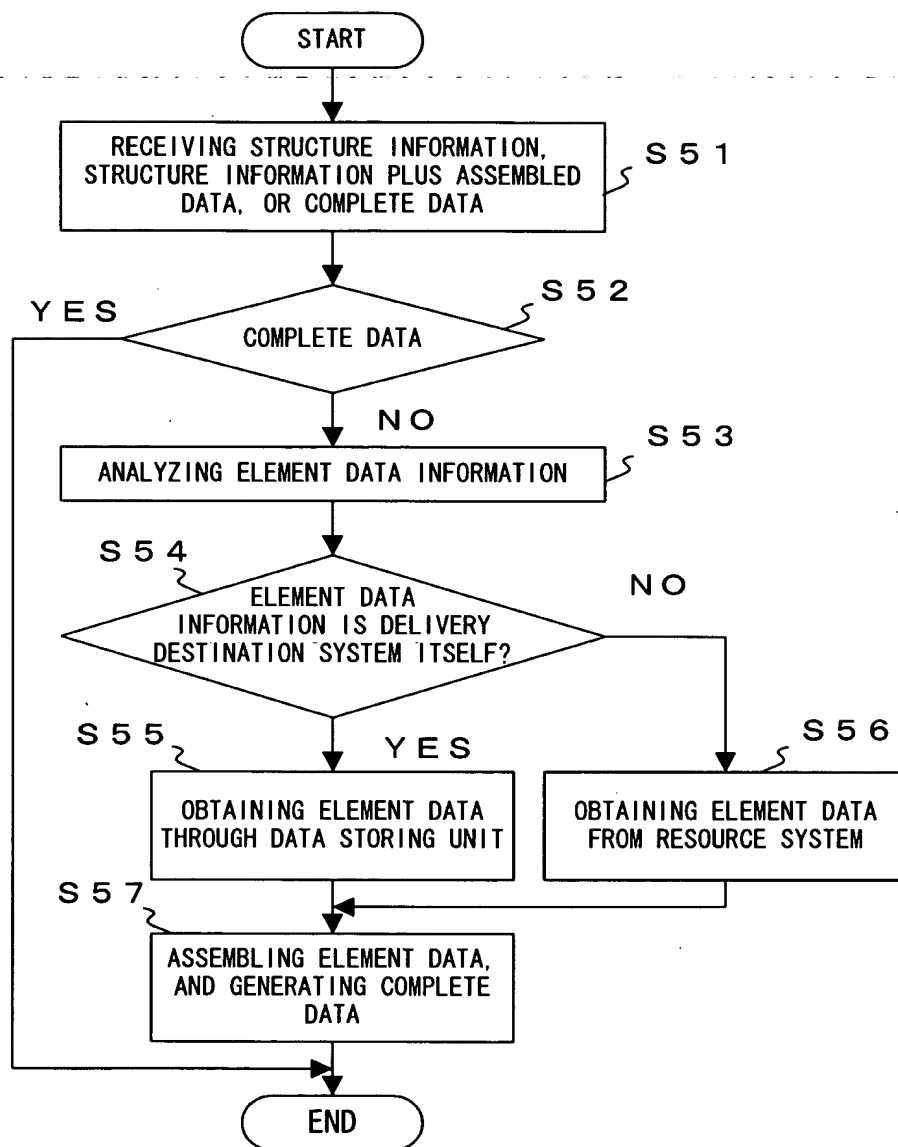


FIG. 20

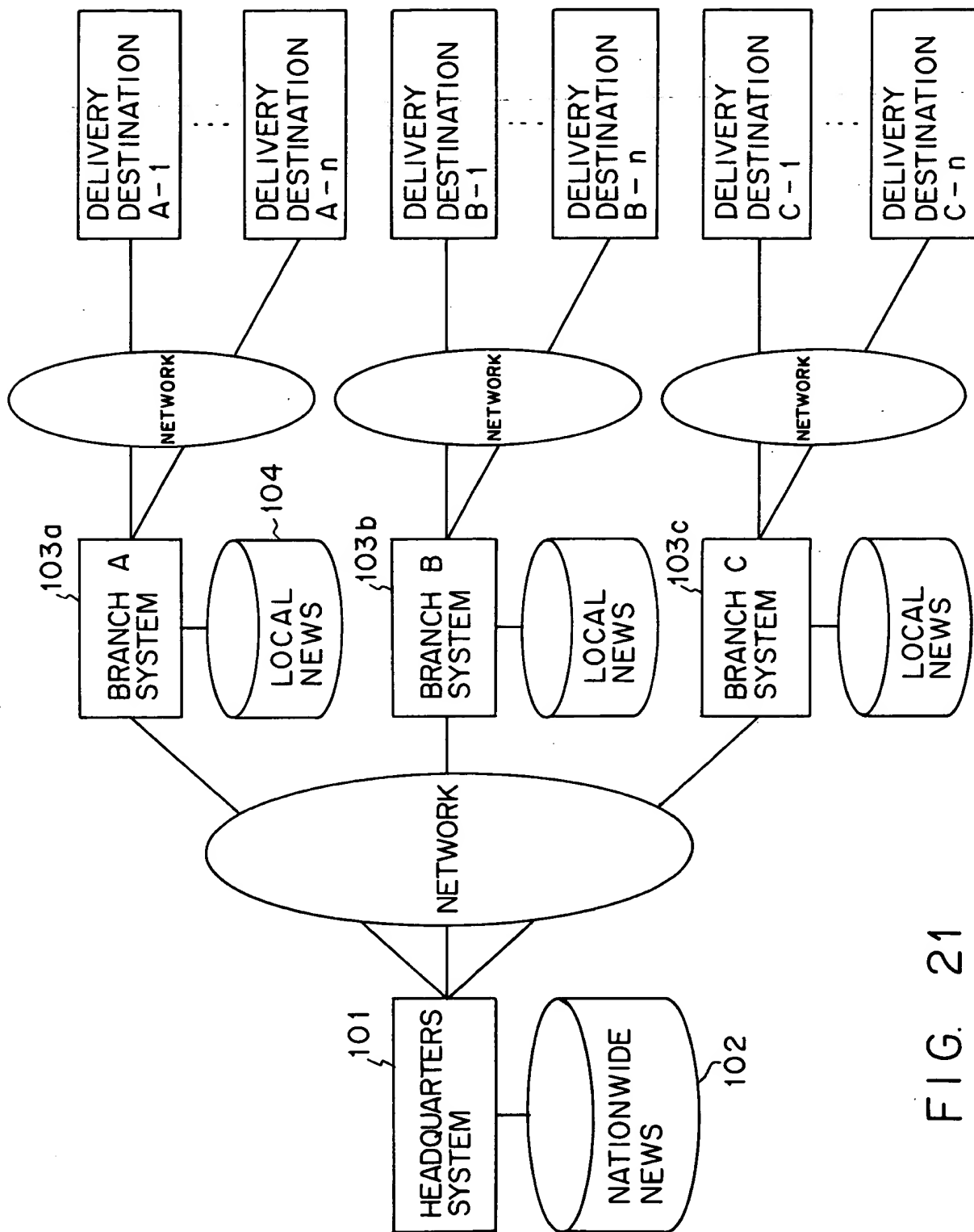


FIG. 21

001200 322500

HEADQUARTERS SYSTEM	ATTACH	NATIONWIDE NEWS			
BRANCH A SYSTEM	ASSEMBLED DATA + LOCAL NEWS	LOCAL NEWS	DELIVERY DESTINATION A-1	...	DELIVERY DESTINATION A-n
BRANCH B SYSTEM	ASSEMBLED DATA + LOCAL NEWS	LOCAL NEWS	DELIVERY DESTINATION B-1	...	DELIVERY DESTINATION B-n
BRANCH C SYSTEM	ASSEMBLED DATA + LOCAL NEWS	LOCAL NEWS	DELIVERY DESTINATION C-1	...	DELIVERY DESTINATION C-n

F I G. 2 2

001260-222990

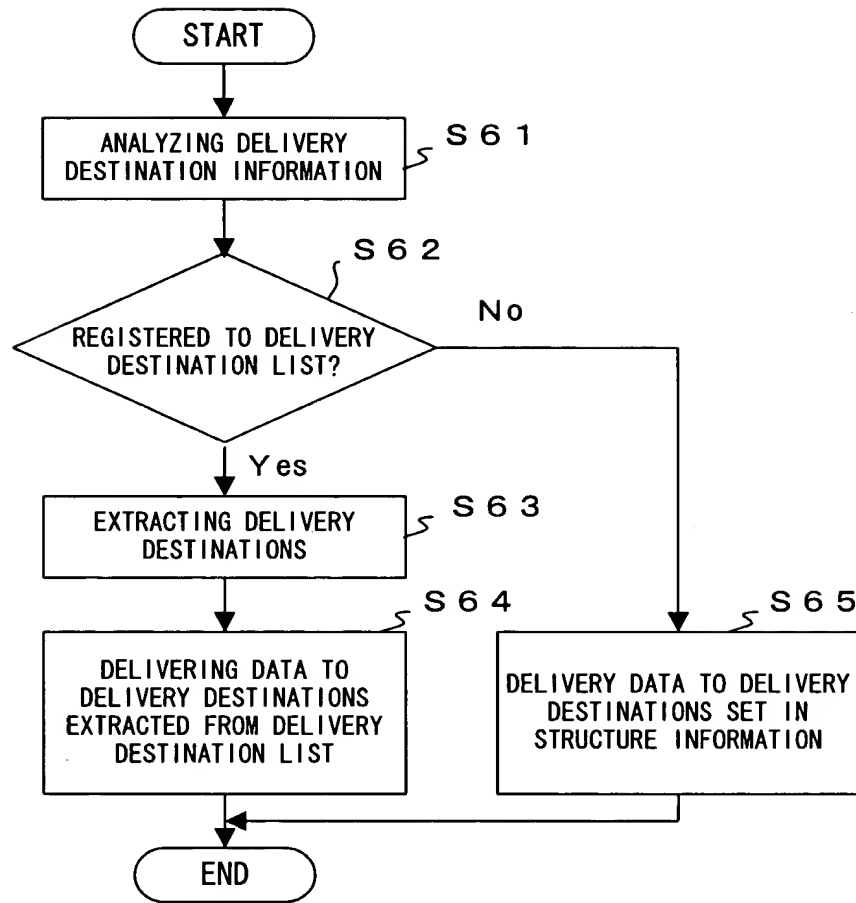
HEADQUARTERS SYSTEM	ATTACH	NATIONWIDE NEWS	
BRANCH A SYSTEM	ASSEMBLED DATA+LOCAL NEWS	LOCAL NEWS	SUBSCRIBER
BRANCH B SYSTEM	ASSEMBLED DATA+LOCAL NEWS	LOCAL NEWS	SUBSCRIBER
BRANCH C SYSTEM	ASSEMBLED DATA+LOCAL NEWS	LOCAL NEWS	SUBSCRIBER

F I G . 2 3

001260-2225960

GROUP NAME	DELIVERY DESTINATION
SUBSCRIBERS	A - 1 A - 2 ⋮ A - n
BUSINESS PARTNERS	X - 1 X - 2 ⋮ X - m
}	}

F I G. 2 4



F I G . 2 5

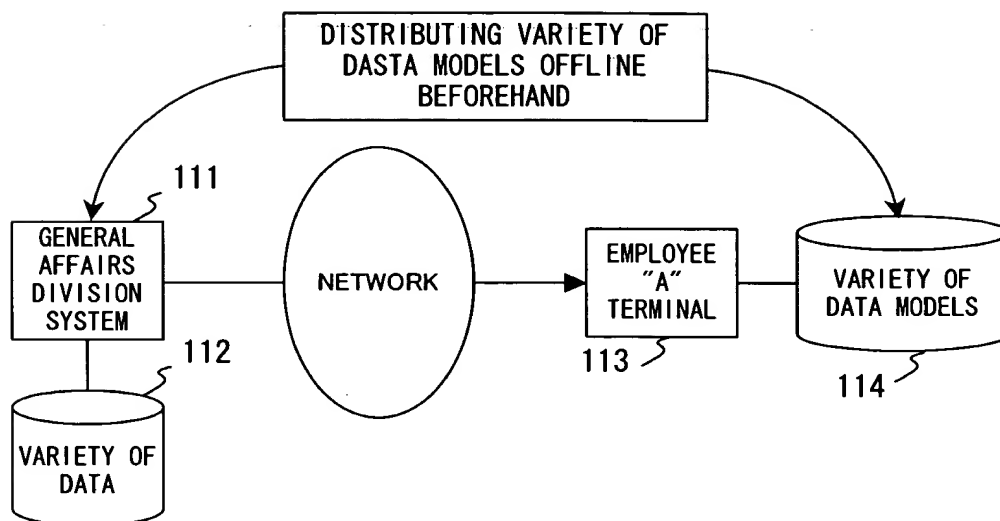


FIG. 26A

GENERAL AFFAIRS DIVISION SYSTEM	ATTACH	BUSINESS PERFORMANCE DATA	INTEROFFICE MEMO	BUSINESS TRIP EXPENSE ADJUSTMENT STATEMENT	
EMPLOYEE "A" TERMINAL	ASSEMBLY INFORMATION	BUSINESS PERFORMANCE REPORT MODEL	INTEROFFICE MEMO MODEL	BUSINESS TRIP EXPENSE ADJUSTMENT STATEMENT MODEL	EMPLOYEE "A" TERMINAL

FIG. 26B

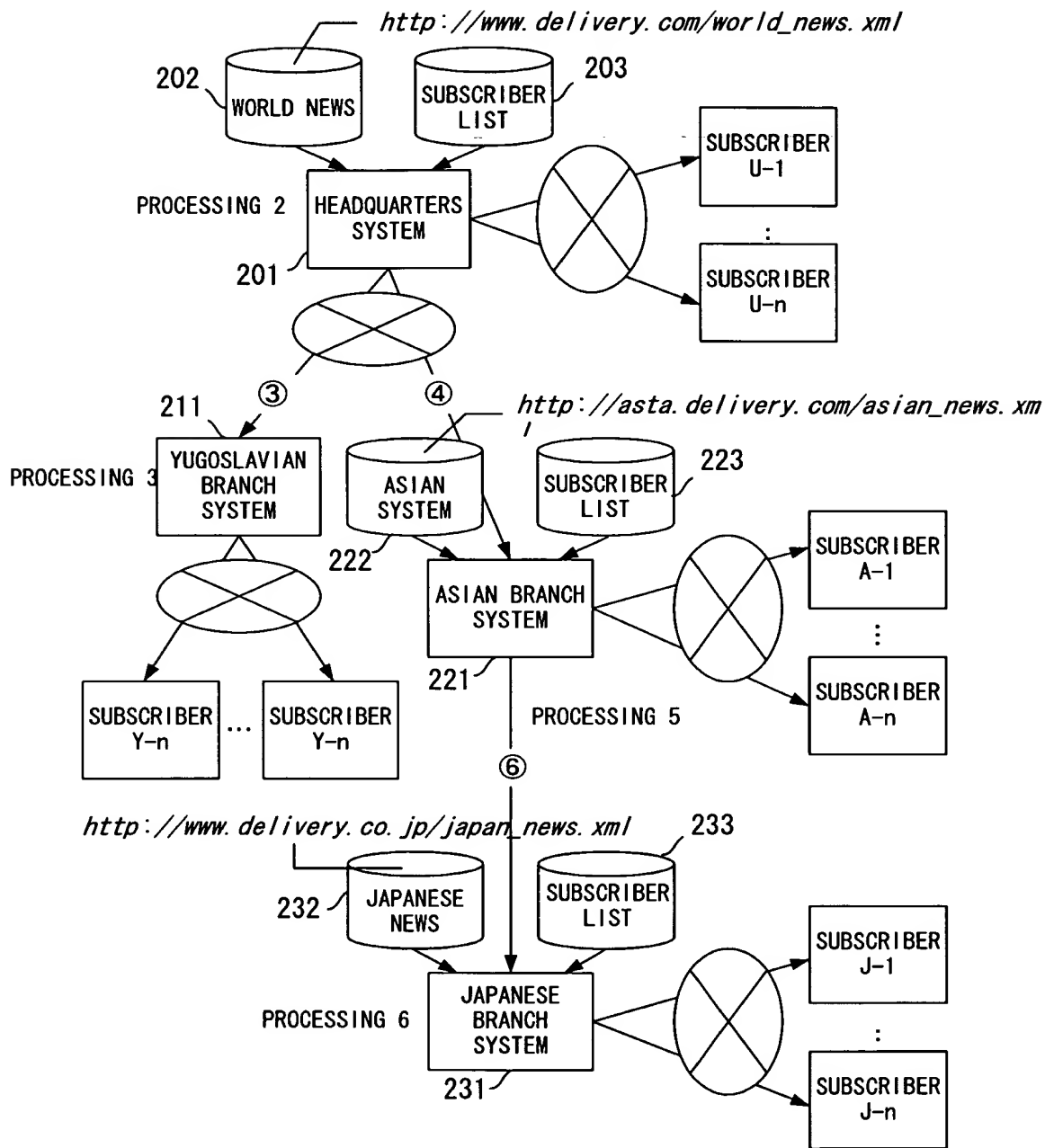


FIG. 27

<?xml version="1.0"?>
 <delivery_definition>
 <!--NewYork-->
 <delivery_info>
 <gateway>newyork@delivery.com</gateway>
 <structure>http://www.delivery.com/structure/news.xml</structure>
 <data_list>
 <news>http://www.delivery.com/world_news.xml</news>
 </data_list>
 <receptionist_list>
 <receptionist>U-1@foo.com</recetptionist>
 ...
 <receptionist>U-n@foo.com</recetptionist>
 </receptionist_list>
 <!--Yugoslavian-->
 <delivery_info>
 <gateway>yugo@delivery.com</gateway>
 <data_list>
 <news>news.xml</news>
 </data_list>
 <receptionist_list>
 <receptionist>Y-1@foo.com</recetptionist>
 ...
 <receptionist>Y-n@foo.com</recetptionist>
 </receptionist_list>
 </delivery_info>
 <!--Asia-->
 <delivery_info>
 <geteway>asia@delivery.com</gateway>
 <structure>http://asia.delivery.com/structure/news.xml</structure>
 <data_list>
 <news>news.xml</news>
 <news>http://asia.delivery.com/asian_news.xml</news>
 </data_list>
 <receptionist_list>
 <category>asia</category>
 </receptionist_list>
 <!--Japan-->
 <delivery_info>
 <gateway>japan@delivery.co.jp</gateway>
 <structure>http://www.delivery.co.jp/structure/japan.xml</structure>
 <data_list>
 <news>news.xml</news>
 <news>thhp://www.delivery.co.jp/japan_news.xml</news>
 </data_list>
 <receptionist_list>
 <category>japan</category>
 </receptionist_list>
 </delivery_info>
 </delivery_info>
 </delivery_definition>

FIG. 28


```
<?xml version="1.0"?>

<!DOCTYPE daily_news [
<!ENTITY world_news SYSTEM "world_news.xml">
]>

<daily_news>
<date>2xxx-xx-xx</date>
<edition>xx</edition>
&world_news;
</daily_news>
```

FIG. 33A

```
<?xml version="1.0"?>

<!DOCTYPE daily_news [
<!ENTITY world_news SYSTEM "http://www.delivery.com/world_news.xml">
]>

<daily_news>
<date>2xxx-xx-xx</date>
<edition>xx</edition>
&world_news;
</daily_news>
```

FIG. 33B

```
<?xml version="1.0"?>
```

```
<daily_news>
```

```
<date>2xxx-xx-xx</date>
```

```
<edition>xx</edition>
```

```
<world_news>
```

```
.....
```

```
</world_news>
```

```
</daily_news>
```

FIG. 34

```
<?xml version="1.0"?>

<!DOCTYPE daily_news> [
<!ENTITY news SYSTEM "news.xml">
<!ENTITY asian_news SYSTEM "asian_news.xml">
]>

<dialy_news>
<date>2yyy-yy-yy</date>
<edition>yy</edition>
&asian_news;
&news;
</daily_news>
```

FIG. 35

```
<?xml version="1.0"?>
```

```
<daily_news>
```

```
<date>2yyy-yy-yy</date>
```

```
<edition>yy</edition>
```

```
<asian_news>
```

```
. . . . .
```

```
</asian_news>
```

```
<daily_news>
```

```
<date>2xxx-xx-xx</date>
```

```
<edition>xx</edition>
```

```
<world_news>
```

```
. . . . .
```

```
</world_news>
```

```
</daily_news>
```

```
</daily_news>
```

FIG. 36

```
<?xml version="1.0"?>

<!DOCTYPE daily_news> [
<!ENTITY news SYSTEM "news.xml">
<!ENTITY japan_news SYSTEM "japan_news.xml">
]>

<dialy_news>
<date>2zzz-zz-zz</date>
<edition>zz</edition>
&japan_news;
&news;
</daily_news>
```

FIG. 37

```
<daily_news>
<date>2zzz-zz-zz</date>
<edition>zz</edition>
<japan_news>
```

```
</japan_news>  
<daily_news>  
<date>2yyy-yy-yy</date>  
<edition>yy</edition>  
<asian_news>
```

```
</asian_news>
</daily_news>
<date>2xxx-xx-xx</date>
<edition>xx</edition>
<world_news>
```

```
</world_news>
</daily_news>
</daily_news>
</daily_news>
```

FIG. 38

DELIVERY ADDRESS	GENRE 1	GENRE 2	...	GENRE n
J-1@foo.ne.jp	on	off		on
⋮				
J-n@foo.ne.jp	off	on		off

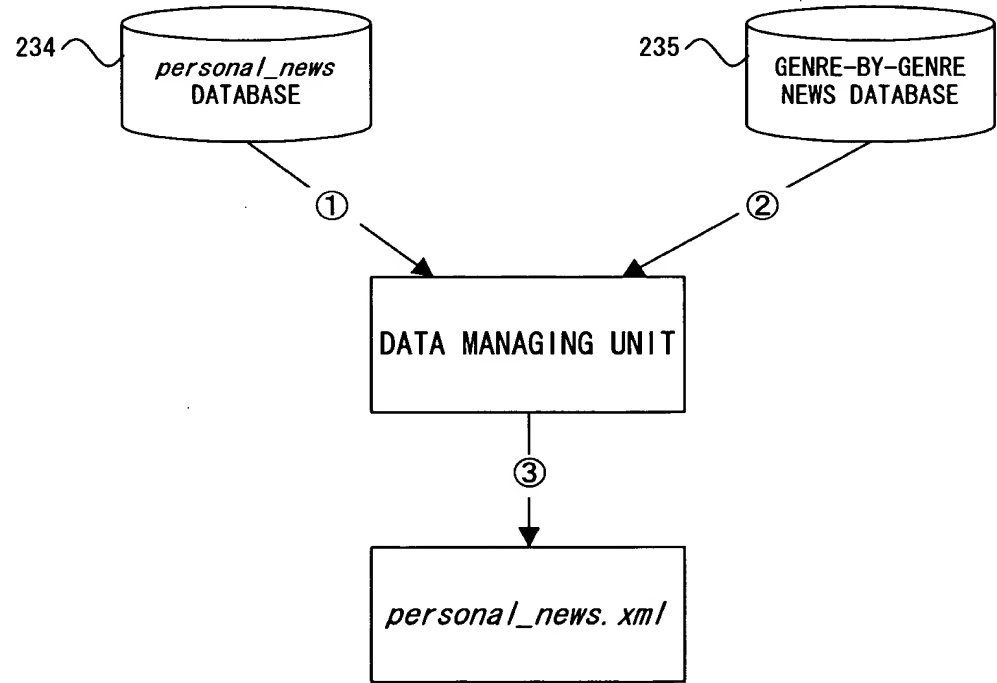


FIG. 40

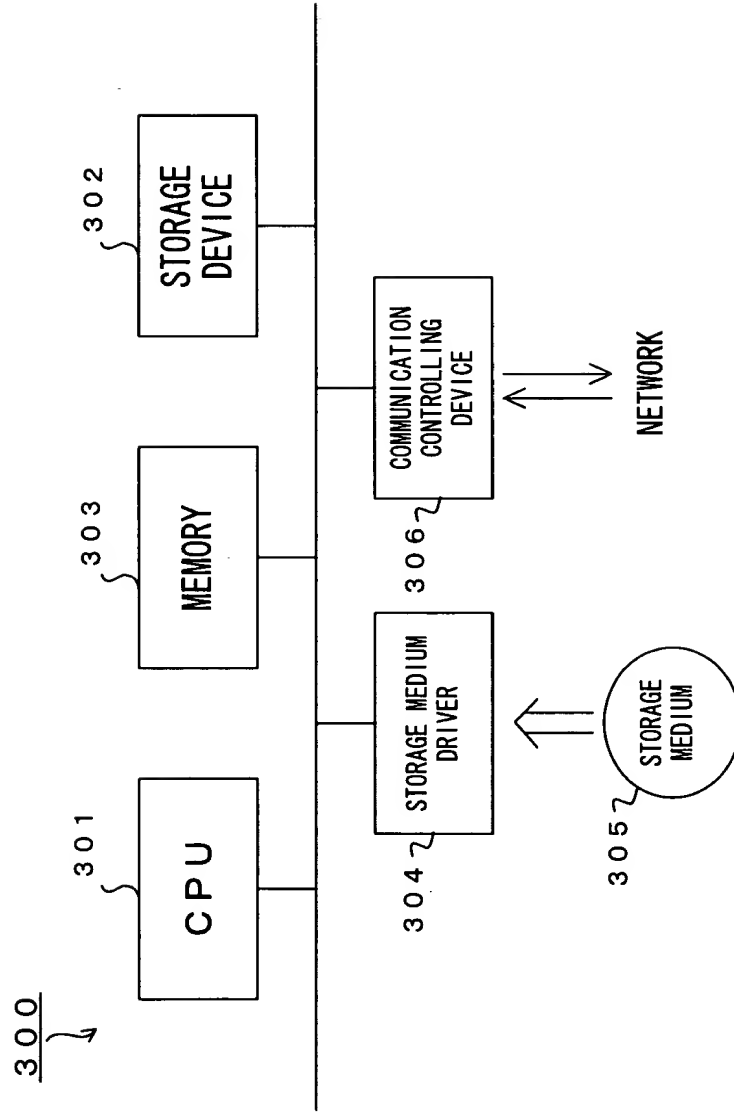


FIG. 41

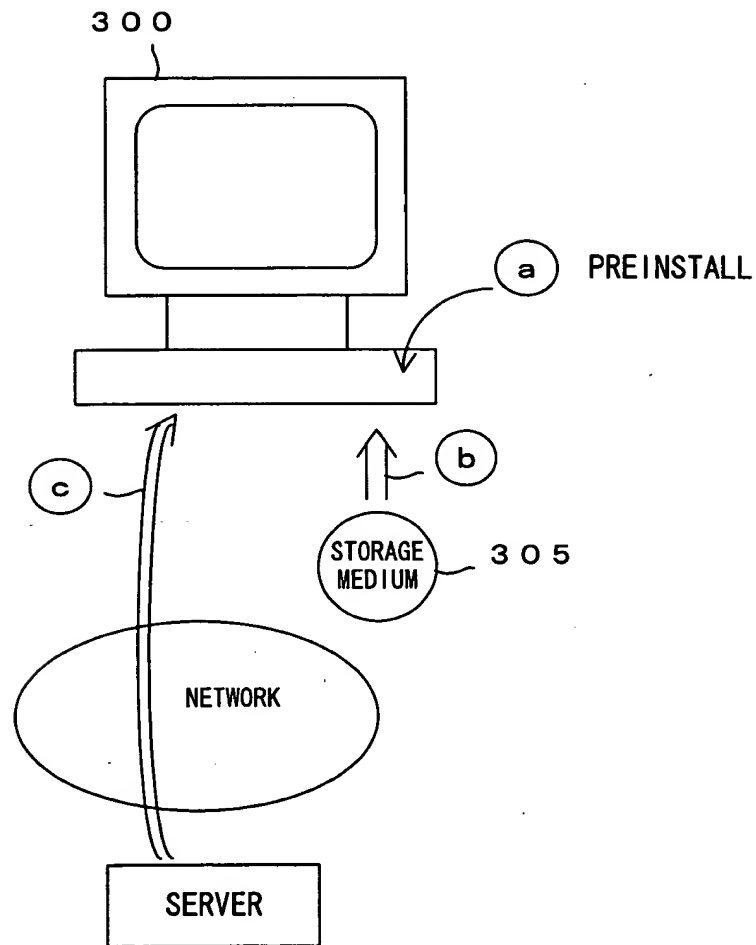


FIG. 42